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ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-3873

EXAMINER	
NELSON, FREDA ANN	
ART UNIT	**PAPER NUMBER**
3639	

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/733,316	KATSUTA ET AL.	
	Examiner	Art Unit	
	Freda A. Nelson	3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☒ Claim(s) *3,7,11,16,20 and 23* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This is in response to the communication filed on January 16, 2004. Claims 1-30 are currently pending.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 05/18/04 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. A copy of PTO-1449 attached hereto.

Specification

3. The disclosure is objected to because of the following informalities:

Page 8, lines 19 and 28, respectively, "cleanness" should be cleanliness";

Page 9, line 13, "cleanness" should be cleanliness".

Appropriate correction is required.

Claim Objections

4. Claims 3, 7, 11, 16, 20, and 23 are objected to because of the following informalities:

In claims 3, 7, 11, 16, 20 and 23, respectively, on line 5, "cleanness" should be "cleanliness". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 recites the limitations "the imaging environment", "the time" and "the reception side" in lines 4-5 and 13, respectively. There is insufficient antecedent basis for these limitations in the claim.

6. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner is unable to determine when imaging of said object of inspection in accordance with said displayed imaging environment conditions is performed.

7. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. Claim 6 recites the limitation "the place" in lines 2. There is insufficient antecedent basis for these limitations in the claim.

8. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 recites the limitation "said acquired digital image environment conditions", "the time" and "the reception side" in lines 4, 5 and 7-8, respectively. There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Iseki et al (US PG Pub. 2002/0007311).

In claim 1, Iseki et al. disclose a system for providing services by storing photograph image data in a large capacity server installed in a camera shop and then providing services through downloading or printing of such stored data as disclosed in the Japanese Unexamined Patent Publication No. Hei 10-150523 (related art 1) wherein the system records and stores the image data photographed by the a camera to the server from the terminals installed in various points via the communication line and thereby enables various output services to the storage requesting persons; and in these services, the storage requesting persons can exchange the data with the other persons (paragraph 00010. Iseki et al. further disclose that since the credit number input screen 360 of FIG. 22 is transmitted from the digital album provider terminal 3 and is then displayed, when the card name of the applicable credit company is selected, the card number is inputted to the card number input column 362 and the contact button 363 is

clicked, the digital album provider terminal 3 determines that payment contract has been agreed, allowing the step to go to the step 117 for confirming the purchased image (paragraph 0092).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iseki et al. in view of Obradovich (Patent Number 6,525,768).

In claim 2, Iseki et al. disclose that since it is possible to retrieve the information such as photographing place and date, a user who is planning the travel can detect the profile of the destination and prepare for the travel through the retrieval based on the traveling place and the latest date(paragraph 0100).

Iseki et al. does not disclose information relating to the place and time at which said object was imaged comprises longitude and latitude information received from a GPS, and standard time information. Obradovich discloses that the camera is a digital camera and the image formed by the digital camera is stored on memory contained within the PCD device, along with a GPS stamp wherein the GPS stamp is placed within the picture image in a manner similar to the placing of a time or date stamp on a digital image picture (col. 23, lines 20-26). Obradovich further discloses that the GPS stamp is placed into the image by overriding areas of memory with the GPS provided data; and the GPS stamp provides latitude and longitude information (col. 23, lines 32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Iseki et al. to include the feature of Obradovich in order to provide a convenient way of accurately placing the location of images (Obradovich; col. 23, lines 33-34).

In claim 3, Iseki et al. disclose that in the retrieval information, it is also possible to input a writer-name in place of the true name, a building name such as Kyoto Ginkakuji-temple as the place, a photograph pickup date as the date, weather as one word and impression of photographer or the like as the other input data (paragraph 0058).

Iseki et al. does not disclose information relating to the place where said object was imaged comprises one or more types of information selected from air temperature, humidity, illumination, intensity of ultraviolet radiation, altitude, air pressure, wind velocity, degree of cleanness and sound. Obradavich discloses that in one embodiment the memory additionally stores data pertaining to normal expected conditions, such as normal temperatures or traffic flow, at the CRD location; and this data could take the form of merely the average normal temperature at the site, but more preferably provides daily or hourly normal temperatures and hourly traffic pattern information col. 17, lines 48-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Iseki et al. to include the feature of Obradavich in order to provide data pertaining to the conditions of the place where the objects were imaged.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iseki et al. in view of Obradovich, in further view of Davis (Patent Number 6,512,856).

In claim 4, Iseki et al. does not disclose that the name or code number of a person performing the imaging who acquired said digital image is further added to said digital image information. Davis discloses a digital imaging system that can be enabled to automatically stamp additional information onto a digital image during the image creation process can enhance the usability of the digital imaging system wherein the stamping information can be a company name or symbol, or it can be information used to track which imaging system was used to create the reproduction or it can be the name of the person creating the reproduction (col. 2, lines 50-59). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Iseki et al. to include the feature of Davis in order to permit the person performing the imaging to stamp other pertinent data, including his name to images.

11. Claim 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iseki et al. in view of Obradovich in further view of Mahe (Patent Number (6,665,363).

In claim 5, Iseki et al. disclose a system for providing services by storing photograph image data in a large capacity server installed in a camera shop and then providing services through downloading or printing of such stored data wherein the system records and stores the image data photographed by the a camera to the server from the terminals installed in various points via the communication line and thereby enables various output services to the storage requesting persons; and in these services, the storage requesting persons can exchange the data with the other persons

(paragraph 0001). Iseki et al. further disclose that since the credit number input screen 360 of FIG. 22 is transmitted from the digital album provider terminal 3 and is then displayed, when the card name of the applicable credit company is selected, the card number is inputted to the card number input column 362 and the contact button 363 is clicked, the digital album provider terminal 3 determines that payment contract has been agreed, allowing the step to go to the step 117 for confirming the purchased image (paragraph 0092).

Iseki et al. does not disclose calling up a digital image which has been acquired by imaging an object of inspection, and which has been stored in memory means along with the imaging environment conditions at the time that said digital image was imaged, via communications means or displaying the imaging environment conditions of inspection in accordance with said displayed imaging environment conditions. Obradovich discloses that in one embodiment the memory additionally stores data pertaining to normal expected conditions, such as normal temperatures or traffic flow, at the CRD location; and this data could take the form of merely the average normal temperature at the site, but more preferably provides daily or hourly normal temperatures and hourly traffic pattern information (col. 17, lines 48-54). Mahe discloses that FIG. 13 is also a diagram showing the grey level of points along a column of the image obtained during inspection inside and outside the weld area (col. 3, line 66-col. 4, line 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Iseki et al. to include the features of Obradovich and Mahe in order to provide data pertaining to the conditions of the place where the objects/inspections were imaged.

In claim 6, Iseki et al. disclose that since it is possible to retrieve the information such as photographing place and date, a user who is planning the travel can detect the profile of the destination and prepare for the travel through the retrieval based on the traveling place and the latest date(paragraph 0100). Iseki et al. further disclose that in the retrieval information, it is also possible to input a writer-name in place of the true name, a building name such as Kyoto Ginkakuji-temple as the place, a photograph pickup date as the date, weather as one word and impression of photographer or the like as the other input data (paragraph 0058).

Iseki et al. does not disclose that the imaging environment condition includes the time when the object was imaged. Obradovich further discloses that the GPS stamp is placed into the image by overriding areas of memory with the GPS provided data; and the GPS stamp provides latitude and longitude information (col. 23, lines 32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Iseki et al. to include the feature of Obradovich in order to provide a convenient way of accurately placing the location and time of images (Obradovich; col. 23, lines 33-34).

In claim 7, Iseki et al. does not disclose information relating to the place where said object was imaged comprises one or more types of information selected from air temperature, humidity, illumination, intensity of ultraviolet radiation, altitude, air

pressure, wind velocity, degree of cleanness and sound. Obradavich discloses that in one embodiment the memory additionally stores data pertaining to normal expected conditions, such as normal temperatures or traffic flow, at the CRD location; and this data could take the form of merely the average normal temperature at the site, but more preferably provides daily or hourly normal temperatures and hourly traffic pattern information col. 17, lines 48-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Iseki et al. to include the feature of Obradavich in order to provide data pertaining to the conditions of the place where the objects were imaged.

12. Claims 8, 12-13, 17-18, 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over of "Component Repair Adds Up To Large Market: Surviving, if not succeeding, in the engine component repair business requires increasing sophistication in terms of technology and business savvy" (herein after referred to as "Component Repairs"), in view of Mahe, in further view of Obradovich.

In claims 8, 12-13, 17-18, 21 and 24, Component Repairs discloses that GEES can provide status updates and online billing and payment like many others, but it also offers an online findings report where customers can view a digital image of their damaged part to see exactly why that part isn't repairable; and if needed, the OEM can overlay the image with a measurement grid so customers can see the exact size of a crack or fracture in their hardware (page 7).

Component Repairs does not disclose imaging parts in which metals are welded. Component Repairs does not further disclose adding to said acquired digital image imaging conditions. Mahe discloses that a digital camera 16 including an optical system 16a and a digitizer module is connected to a microcomputer 17 via an image acquisition card and the microcomputer 17 also includes a digital input/output card enabling the microcomputer to communicate with an automatic control system of the TIG welding equipment; after checking the position of the joint plane relative to the welding axis, the microcomputer communicates to the welding control system an instruction authorizing or prohibiting welding, depending on the result of the check on the position of the joint plane; and similarly, a verdict is transmitted to the control system after inspecting the weld (col. 5, lines 31-42). Obradovich further discloses that the GPS stamp is placed into the image by overriding areas of memory with the GPS provided data; and the GPS stamp provides latitude and longitude information (col. 23, lines 32). Obradovich further discloses that in one embodiment the memory additionally stores data pertaining to normal expected conditions, such as normal temperatures or traffic flow, at the CRD location; and this data could take the form of merely the average normal temperature at the site, but more preferably provides daily or hourly normal temperatures and hourly

traffic pattern information (col. 17, lines 48-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Component Repairs to include the features of Mahe and Obradovich in order to expand the online capabilities to include images of welding repairs.

13. Claims 9, 14, 19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over of Component Repairs, in view of Mahe, in further view of Obradovich, still in further view of Hartley (Patent Number 5,388,129).

In claims 9, 14, 19 and 22, Component Repairs does not disclose that said digital image of welded parts acquired by imaging said parts in which metals are welded is a digital image of parts in which metals are welded which have been subjected to a penetrant test processing or a magnetic particle test processing. Hartley discloses that ultrasonic examination may be used to detect subsurface weld anomalies such as subsurface cracks, local thinning, or other anomalies; and dye penetrant inspections, magnetic particle testing, and eddy current inspection may also be used to detect subsurface weld anomalies (col. 3, lines 11-16). Hartley et al. further discloses that a radiographic film is interposed between the radiation source assembly and the radiation shielding assembly and adjacent the weld for capturing a volumetric image of the weld on the film (abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Component Repairs include the feature of Hartley in order to detect defects in welds by other methods prior to imaging.

14. Claims 10-11, 15-16, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over of Component Repairs, in view of Mahe, in further view of Obradavich, still in further view of Hartley, still in further view of Davis (Patent Number 6,512,856).

In claims 10-11, 15-16, 20 and 23, Component Repairs does not disclose that said imaging environment conditions include the place and time where said object was imaged, the person who performed the imaging, and information relating to the environment at the place where said imaging was performed. Obradavich discloses that in one embodiment the memory additionally stores data pertaining to normal expected conditions, such as normal temperatures or traffic flow, at the CRD location; and this data could take the form of merely the average normal temperature at the site, but more preferably provides daily or hourly normal temperatures and hourly traffic

pattern information col. 17, lines 48-54). Davis discloses a digital imaging system that can be enabled to automatically stamp additional information onto a digital image during the image creation process can enhance the usability of the digital imaging system wherein the stamping information can be a company name or symbol, or it can be information used to track which imaging system was used to create the reproduction or it can be the name of the person creating the reproduction (col. 2, lines 50-59). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Component Repairs to include the feature of Obradavich and Davis in order to permit inspecting welds to provide stamped data pertaining to the conditions of the place where the objects were imaged, as well as, permitting the person performing the imaging to stamp other pertinent data including his name to images.

15. Claims 25-30 is rejected under 35 U.S.C. 103(a) as being unpatentable over of "Component Repair", in view of Mahe, in further view of Obradovich, still in further view of Glass (US PG Pub. 2002/0056043)

In claims 25-29, Component Repair does not disclose that digital image information detects alterations of said digital image. Component repair does not further disclose that the digital image is electronic watermark information. Component Repair does not further disclose that digital information includes information relating to whether or not falsification has occurred subsequent to the preparation of the digital image information. Component Repair still does not further disclose that the digital image information is an electronic signature in which said digital image is converted into a summary by a hush function, and the summary is encoded using an encoding key. Glass discloses that a substitution or tampering of image data after output from the secured camera will be detectable via downstream data processing, and substitution or tampering of image data prior to application of security information would be extraordinarily difficult or impossible (paragraph 0032); the digital signature preferably is a secure hash function which takes the following as inputs: each byte of image data in the frame; a "secret key" which is stored and remains hidden inside the camera; and optionally a digital "token" entered into the camera electronics by the host (paragraph 0034); and if a watermarking technique is used to authenticate the image, any image processing which alters the data after watermarking (such as lossy compression) will not allow for certainty in the authentication process, which may be undesirable for high security applications (paragraph 0037). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Component Repair to include the feature of Glass in order to ensure that images transmitted over a network to a server which authenticates that the data has not been altered by recomputing the code using its own knowledge of the secret key and transaction token needed to generate the code.

In claim 30, Component Repairs discloses that GEES can provide status updates and online billing and payment like many others, but it also offers an online findings report where customers can view a digital image of their damaged part to see exactly why that part isn't repairable; and if needed, the OEM can overlay the image with a measurement grid so customers can see the exact size of a crack or fracture in their hardware (page 7).

Component Repairs does not disclose imaging parts in which metals are welded. Component Repair does not disclose that digital image information detects alterations of said digital image Mahe discloses that a digital camera 16 including an optical system 16a and a digitizer module is connected to a microcomputer 17 via an image acquisition card and the microcomputer 17 also includes a digital input/output card enabling the microcomputer to communicate with an automatic control system of the TIG welding equipment; after checking the position of the joint plane relative to the welding axis, the microcomputer communicates to the welding control system an instruction authorizing or prohibiting welding, depending on the result of the check on the position of the joint plane; and similarly, a verdict is transmitted to the control system after inspecting the weld (col. 5, lines 31-42). Glass discloses that a substitution or tampering of image data after output from the secured camera will be detectable via downstream data processing, and substitution or tampering of image data prior to application of security information would be extraordinarily difficult or impossible (paragraph 0032). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Component Repairs to include the features of Mahe and Glass in order to ensure that images of welds are transmitted over a network to a server which authenticates that the images has not been altered.

Conclusion

16. The examiner has cited prior art of interest, for example:

1) Ahmed et al. (Patent Number 5,602,885), which disclose automated girth weld inspection of nuclear fuel rods.

2) Chandhoke et al. (US PG Pub. 202/0186245), which disclose a system and method for configuring hardware device to execute a prototype.

2) Tillotson (US PG Pub. 2004/0005078), which discloses a method and apparatus for digitally watermarking images created with mobile imaging device.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freda A. Nelson whose telephone number is (571) 272-7076. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FAN 09/03/2003

Freda Nelson

THOMAS A. DIXON
PRIMARY EXAMINER